



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/740,260

12/18/2003

Osman Polat

9476

1914

27752 7590 06/27/2007

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION - WEST BLDG.
WINTON HILL BUSINESS CENTER - BOX 412
6250 CENTER HILL AVENUE
CINCINNATI, OH 45224

EXAMINER

FORTUNA, JOSE A

ART UNIT

PAPER NUMBER

1731

MAIL DATE

DELIVERY MODE

06/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/740,260	Applicant(s) POLAT ET AL.	
	Examiner José A. Fortuna	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-22 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-4 and 6-22 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 2/9/04 & 12/18/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 6-20 and 22 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Garnier et al., US Patent No. 6,861,380 B2. Garnier et al. teaches a method of making multilayered paper webs in which the web is formed by at least one layer of a blend of synthetic and cellulosic fibers pulps see abstract. Garnier et al. teach different ways in which the layers could be combined, i.e., a first layer of hardwood fibers, i.e., short fibers, and a second layer of softwood fibers, long fibers and the synthetic fibers are present either in the first of the second or both layers, see column 1, lines 48-63. Note that this configuration reads in the independent claims, i.e., a first layer having a mixture of hardwood and synthetic fibers, the hardwood fibers are the recognized short fibers and then a second layer of softwood fibers, i.e., the long fibers layer. Note also that column 7, lines 29-65, teach a layer

Art Unit: 1731

configuration that reads over the independent claims, i.e., the outer layers 212 and 216 of figure 5 contain a blend of short fibers and synthetic fibers and layer 214 contains 100% long fibers.

Note that layer 216 is deposited onto the forming wire first and then layer 214, which indicates that the mixtures of synthetic and short, hardwood fibers are deposited first onto the foraminous wire/fabric and then the long fibers layer, 214 is deposited on top of the blend. The length ratio of the synthetic fibers and the short and/or long claimed is disclosed in column 3, lines 34-65.

Note that in that lines Garnier et al. teach the average length of the different types of fibers, i.e., low average fibers length between 0.7-1.2 mm, such fibers are obtained from virgin hardwood pulps and secondary fiber pulps from several sources: high average fibers have typically fiber length between 1.5 to 6 mm and the source of such fibers are obtained from virgin softwood pulps; the synthetic fibers have an average length from 0.5 to 30 mm, column 1, lines 58-63.

Garnier et al. teach also that the web is formed using the same or similar wires as disclosed, see column 12, lines 6-14 and column 11, lines 23-42. Also Garnier et al. teach that in some instances it is desired to impart a greater level of bonding between adjacent synthetic fibers and this is done by increasing the drying temperature at levels over the melting point of the synthetic fibers, see column 15, lines 26-45. Note that Garnier et al. teach that any papermaking process can be used to make the multilayered paper, i.e., wet press, throughdrying, creping, uncreped throughdrying, single recreping, embossing, air laying, etc., see column 11, lines 23-32.

As to the newly added limitation of the redistribution of some of the synthetic fibers, this is inherent to Garnier et al. since some of the synthetic fibers would be at least softened by the heat of the dryer. Note also that if the web is throughdried as suggested by the reference the hot air would pass through the web, which also would contribute to the

Art Unit: 1731

redistribution, by melting/softening of some of the fibers, specially after the subsequent operation, i.e., drying. The softening and fusing of the synthetic fibers by heat, is taught by Garnier et al in column 6, lines 18-34.

It seems that Garnier et al. teach all the elements of the above claims or at least the minor modification(s) to obtain the claimed invention would have been obvious to one of ordinary skill in the art.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 1731

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 4 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garnier et al., cited above in view of Kershaw et al., US Patent No. 5,409,572 or Vinson, US Patent No. 5,405,499.

Garnier et al. invention has been discussed above. Garnier et al. are silent as to the coarseness of the short fibers. However, both Vinson and Kershaw et al. teach that having short fibers with low coarseness, i.e., below 50-mg/100 m, would improve the perceived softness of the web, see Kershaw et al. column 3, line 67 through column 4, line 4, line 8; and Vinson column 1, lines 53-60. Therefore, using low coarseness short fibers, i.e., low coarseness hardwood fibers would have been obvious to one of ordinary skill in the art so as to improve the softness of the tissue taught by Garnier et al.

7. Claims 11-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garnier et al., cited above in view of applicants Admission.

Garnier et al. has been explained above. Garnier et al. teach that forming members similar to the ones disclosed can be used to form the tissue web, see above. However, if applicants consider that the suggested forming structures suggested by Garnier et al. are not the same or similar than the ones disclosed and therefore would not have the channels forming a patten. Applicants admit that such forming members are well known in the art, see pages 11-13 of the current application, where applicants exemplify at least 10 prior art references having the desired configuration. Therefore, using a channeled forming wire/fabric/felt/belt would have been obvious to one of ordinary skill in the art since he/she would have reasonable expectation of success if such

Art Unit: 1731

forming wire/fabric/felt/belt were used to form the tissue suggested by Garnier et al. Note that it has been held that “[W]here two equivalents are interchangeable for their desired function, substitution would have been obvious and thus, express suggestion of desirability of the substitution of one for the other is unnecessary.” In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982); In re Siebentritt, 372 F.2d 566, 152 USPQ 618 (CCPA 1967). Note the advantages of using a forming belt with channels as suggested by applicants, i.e., forming a tissue having regions of different basis weights in which such regions serve for different purposes, i.e., the high basis weight provides strength, the low basis weights provides softness, etc., see for example US Patent No. 5,277,761, column 1.

Response to Arguments

8. Applicant's arguments filed on June 13, 2007 have been fully considered but they are not persuasive.

Applicants argue that there is no redistribution of the fibers of the cited reference after the melting or softening by heat. The examiner respectfully disagrees. When the fibers are melted or softened by heat the fibers lose the original form, usually a fiber expand within the system, and when cooled down the form of the fibers is different than the original fiber. So changes cause the redistribution of the fibers, since such fibers occupy more area per unit of mass in the system. Also, by the softening of the fibers by heated air, i.e., throughdrying, some of the fibers, which are soften and/or in liquid form, i.e., melted, would move from the original position causing at least some to redistribute in the web. While applicants argue that there is no redistribution of the fibers in the cited references, applicants have not explained or provided evidence of why the softening of the synthetic

Art Unit: 1731

fibers of the cited reference would not behave in the same way as claimed by the use of heat.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



José A Fortuna
Primary Examiner
Art Unit 1731

JAF